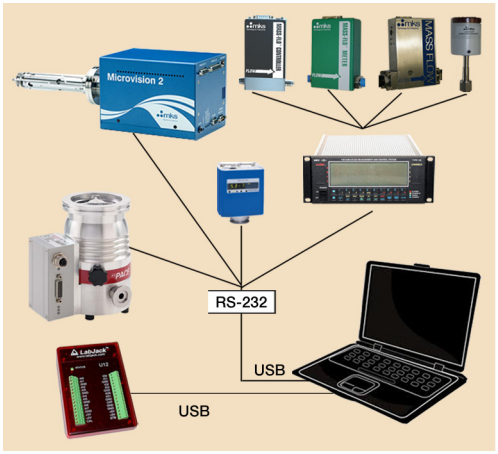
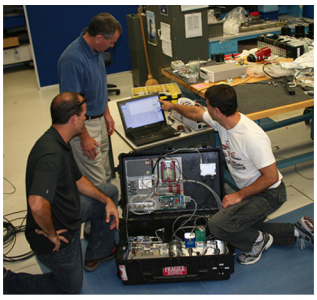
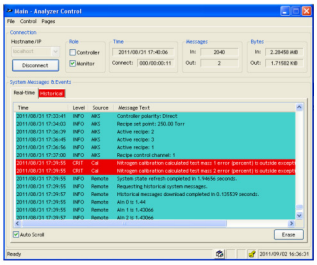
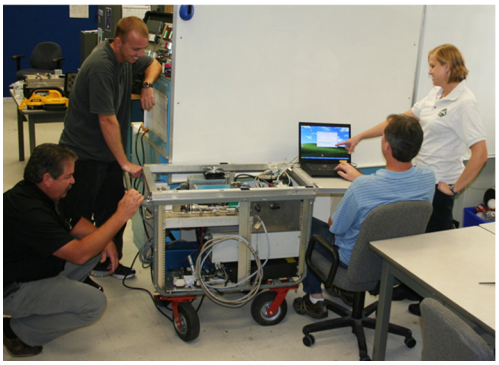
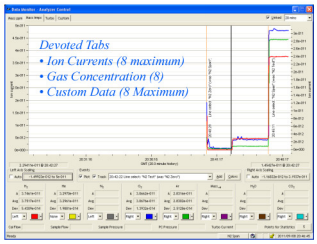
John F. Kennedy Space Center's Software to Control and Monitor Gas Streams











The National Aeronautics and Space Administration (NASA) seeks partners interested in the commercial application of the Software to Control and Monitor Gas Streams. Innovators at the John F. Kennedy Space Center have developed a software package that interfaces with various gas stream devices such as pressure transducers, flow meters, flow controllers, valves and analyzers. All of these devices can be analyzed using one computer interface. Previously, other products (software packages) were used on multiple computers to monitor and/or control gas stream devices. Monitoring the gas streams was difficult with multiple computers and programs, and this difficultly compounded by the need for timing of the various software products. NASA's software package combines the capabilities of these other software products in a unified package, with the benefit of merged user screens, data recording files, etc.

BENEFITS

- Single computer interface
- Real-time display of raw data
- Combines multiple monitoring and control analyzers into one software package
- Capable of timing events
- Records variety of data with proper timing

opportunity

APPLICATIONS

- Instruments, subsystems, and process control solutions that measure, control, power, monitor, and analyze critical parameters of advanced manufacturing processes
- Test and measurement instruments
- Flow meters, pressure control, and vacuum gauges
- Mass spectrometers
- Gas and liquid chromatographs

TECHNOLOGY STATUS

- ☐ Patent pending
- ☐ U.S. patent
- ☐ Copyrighted
- ☑ Available to license
- ☐ Available for no-cost transfer
- ☐ Seeking industry partner for further codevelopment

Technology Details

This complex software package is composed of two primary parts: hardware communication interfacing and user interfacing. The hardware communication interfacing section allows the computer to transfer data and commands (via digital or analog signals) to a wide variety of system components, such as sensors, valves, transducers, analyzers, and pumps. The hardware communication interfacing section also allows the recording of the transferred data/commands to be stored on the local computer (PC or laptop). The user interface section gathers the data from the hardware interfacing section and presents it to the user in various user-configurable methods. The two most common methods of providing data to the user are via time-domain charting and real-time parameter value/status.

Partnership Opportunities

NASA is seeking licensees of the copyrighted software. All NASA licenses are individually negotiated with the prospective licensee, and each license contains terms concerning commercialization (practical application), license duration, royalties, and periodic reporting. NASA licenses may be exclusive, partially exclusive, or nonexclusive. If your company is interested in the new Software to Control and Monitor Gas Streams, or if you desire additional information, please reference Case Number KSC-13643 and contact:

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